

APPROVED MEETING MINUTES
SOUTH CAROLINA SHORELINE CHANGE ADVISORY COMMITTEE
Topic: Public Comments and Outside Perspectives
November 30, 2007 – 9:30am-4:00pm

This document is not intended to be a meeting transcript, *per se*. It is a summary of key themes and some (though not all) of the background dialogue. The meeting summary's structure roughly parallels that of the meeting agenda but is not necessarily true to the temporal order of discussion. A digital recording of the meeting is located at SCDHEC-OCRM's Charleston office.

In Attendance:

1) Advisory Committee members:

Jeff Allen,	Clemson University
Sara Brown,	U.S. Army Corps of Engineers
Mark Caldwell,	U.S. Fish & Wildlife Service – <i>alt. for Tim Hall</i>
Jimmy Carroll,	Carroll Realty
Jimmy Chandler,	S.C. Environmental Law Project
Mary Conley,	The Nature Conservancy
Toni Connor-Rooks,	City of Folly Beach
Paul Conrads,	U.S. Geological Survey
Hamilton Davis,	S.C. Coastal Conservation League – <i>alt. for Nancy Vinson</i>
Rick DeVoe,	S.C. Sea Grant Consortium
Kirstin Dow,	University of South Carolina
Josh Eagle,	University of South Carolina
Cindy Fowler,	NOAA Coastal Services Center – <i>alt. for Jeff Payne</i>
Bob George,	G. Robert George & Associates, Inc.
Tina Hadden,	U.S. Army Corps of Engineers
Scott Harris,	Coastal Carolina University
Mike Katuna,	College of Charleston
Norm Levine,	College of Charleston
Jim London,	Clemson University
Chris Mack,	Dewberry, Inc.
Jim Morris,	University of South Carolina
Linda Tucker,	City of Isle of Palms
Bob Van Dolah,	S.C. Department of Natural Resources

2) Guest Speakers:

Angela Sunley,	Texas General Lands Office
Dr. John Dean,	1987 Blue Ribbon Committee member
Dr. Richard Beck,	1987 Blue Ribbon Committee member

3) S.C. Department of Health & Environmental Control:

Braxton Davis,	OCRM Science & Policy Director
Barbara Neale,	OCRM Regulatory Director
Bill Eiser,	OCRM Staff Oceanographer
Dan Burger,	OCRM Communication & Technical Services Director
Melissa Rada,	OCRM Science & Policy Program Coordinator
Rheta Geddings,	OCRM External Affairs and Enforcement Director
Sadie Drescher,	OCRM Science & Policy Researcher
Mark Messersmith,	OCRM Science & Policy Researcher
Matt Slagel,	NOAA Coastal Management Fellow

4) S.C. Office of Human Resources

Nathan Strong,	Facilitator
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Welcome and Introductions:

Braxton Davis, Director of OCRM's Science & Policy Division, provided a brief overview of the Shoreline Change Initiative and the purpose of the Advisory Committee. Dr. Davis reminded those present that written comments from the public can be directed to him and will be accepted on an ongoing basis for the duration of the Committee process.

Nathan Strong, the facilitator for the Advisory Committee meetings, asked that the Advisory Committee members stand and introduce themselves to those who attended the public hearing. The members introduced themselves and their backgrounds and interests before the public hearing commenced.

Public Hearing:

The first speaker at the public hearing, Dr. Gary McGraw, owns property on Dewees Island, SC and Ocean Isle, NC. He began by thanking the Committee for its future work, and he emphasized that the problems of coastal erosion and the need for shoreline management will not go away. The speaker stated that hundreds of small, 5-gallon sandbags washed ashore on Dewees Island before they were removed from the beaches of Wild Dunes and replaced with larger sandbags. He brought numerous shredded sandbags that he collected to show the Committee as he discussed that they are not biodegradable and when shredded, resemble food for sea turtles. He also described larger sandbags as a problem because if they break and wash out to sea with the tide, they float at or above the surface and present a hazard to boaters. The speaker believes the Committee should consider disallowing the use of sandbags, even on a temporary basis. He also provided the details of a beach renourishment project on Ocean Isle, NC in 2001 that added an estimated 1,000,000 cubic yards of sand from an offshore source. With this project, dune vegetation was planted heavily to promote natural dune growth, and homeowners were required to pay about \$5,000-\$7,000 each to build their own dune walkovers. Ocean Isle is a public beach, so funding was 75% federal and 25% local. Nourishment was not allowed on the ends of the island because these areas were deemed too dynamic. Some houses in these non-nourished areas were demolished at the owner's expense, and some owners paid to move their houses back. A Committee member asked the speaker if the ends of Ocean Isle are Coastal Barrier Resources Act (CBRA) zones since the U.S. Army Corps of Engineers cannot contribute to a renourishment project in a CoBRA zone. Another Committee member asked if litigation was brought against the town by homeowners in the non-nourished areas of Ocean Isle. The speaker was not certain about the answers to these questions.

The second speaker at the public hearing, Mr. Rob Rettew, spoke on behalf of the new Hunting Island Lease Holders Association. The speaker's father built a small cabin in Hunting Island State Park in 1960, and at that time, there was about 500 feet of beach fronting the cabin. Currently, water reaches beneath his cabin. There are 22 private leases on the island and 12 State-owned cabins. Two of the State-owned cabins were demolished recently due to undercutting and erosion, and three private cabins have been condemned due to septic tank issues. A groin and renourishment project was recently

completed on the northern end of Hunting Island (early 2007). The cabins are on the southern end of the island. The original groin project design called for nine groins, but a lack of sufficient funding reduced the number to six groins. The amount of sand dredged and placed on the beach for renourishment was also less than the original project design. In the speaker's opinion, the incomplete groin project exacerbated erosion to the south of the project area. Additionally, the speaker believes that a marginal flow channel has deepened and migrated close to shore, further accelerating the erosion of the beach. He would like for retreat to be considered on Hunting Island, but the S.C. Dept. of Parks, Recreation, and Tourism currently does not allow for property to be moved elsewhere on the island. A Committee member asked the speaker if the funding shortfall was state or federal. The speaker believes the litigation costs of a lawsuit brought by the Fripp Company concerning the borrow site and source of sand for renourishment may have taken away from the funding. The speaker submitted Hunting Island erosion information materials for the record. These materials included a PowerPoint presentation and a video recording from an October 2007 meeting at which the permitting process, emergency orders, and past and present erosion of Hunting Island were discussed. The video recording is available for Committee members from OCRM's Charleston office, and the PowerPoint presentation was posted on the Shoreline Change Advisory Committee website: http://www.scdhec.gov/environment/ocrm/science/shoreline_comm.htm.

Committee Logistics Discussion:

The Committee approved the minutes from the meeting on September 14, 2007 (the final minutes are now posted on the Shoreline Change Advisory Committee website). Braxton Davis led the discussion of the revised Charge to the Committee, and the Charge was accepted in its revised form (also available on the website).

Several Committee members expressed concern that it is unknown exactly how the results and final report of the Committee will be used. OCRM staff responded that the Committee is free to recommend "next steps" at the conclusion of the final report, and those steps will likely depend on the findings of the Committee. It is presently uncertain whether or not a Blue Ribbon Committee will be convened to follow on the Advisory Committee's report (which will be presented to the DHEC Board of Directors). It is envisioned that the Advisory Committee will explore general policy options for DHEC and other agencies to consider; that these options will be examined in terms of their pros and cons, levels of support, barriers to consensus, etc., and that results of this work could potentially be used by a future Blue Ribbon Committee or others to craft new or revised legislation or regulations concerning shoreline management in South Carolina. A Committee member stated that perhaps presentations by the Committee to the General Assembly would be a good approach to new policy making.

A Committee member suggested that the original 1987 Blue Ribbon Committee report should be used as a strong foundation for discussions of the group (this document is included in the member information packets and is also posted on the website). Davis responded that the agenda for the January 25 meeting will include a review and discussion of the consensus-based "findings of fact" of the 1987 Committee.

The Committee is concerned that the attendance at the public hearing this morning was poor due to insufficient notice and the time of day. The Committee recommends that the public hearings be more widely publicized, that they be held throughout the State at different venues, and that they be held in the evening so more members of the public can attend. Additionally, the Committee would like to have public comment periods at all future meetings. The Committee prefers to meet during the day and then have a public hearing during the evening. OCRM staff responded that they had used the same public notice as with any other permit or agency action, and that poor attendance was likely more attributable to the time of day. However, OCRM staff agreed with all of the Committee's recommendations, including expanded publicity, evening hearings, and regional meetings. Future meetings and public hearings will be planned accordingly.

Nathan Strong led the Committee in a discussion of the need for a group charter, which would help guide the Committee's interactions and decisionmaking. The Committee agreed to begin working on, or provide comments on, a draft charter.

Future Meeting Schedule:

Next meeting: Research and Information Priorities: January 25, 2008
Place: Green Quad, Learning Center for Sustainable Futures, USC, Columbia, SC
Format: Meeting during day, followed by research community and public hearing late afternoon. SC Sea Grant Consortium will assist with invitations for research community.

Fourth meeting: Beachfront Retreat Policy February 21, 2008
Place: **TBD**, Beaufort, SC
Format: Meeting during day, followed by public hearing during evening

Presentations on Other States' Perspectives:

Braxton Davis presented recent developments in shoreline management in other states (Massachusetts, Maryland, North Carolina, Georgia, and Florida) (this presentation is now posted on the Advisory Committee's website). A Massachusetts Coastal Hazards Commission convened in 2006-2007 and created a series of recommendations through a final report. These included mapping and modeling climate change and sea-level rise, and implementing a regional sand management program. Two information products recently developed in Massachusetts are the South Shore Coastal Hazards Characterization Online Atlas and the Historic Shoreline Change Project. Maryland has developed an interactive map viewer called Maryland Shoreline Changes Online, which allows users to display a series of historical shorelines and examine site-specific rates of change. Additionally, Maryland's Shoreline Situation Reports are county-level studies that document the riparian land use, bank conditions, and shoreline features along the coast. North Carolina has a number of recent beachfront-related policy developments, including sand bag orders, and proposed beachfront setback policy revisions that would require setbacks to be based on size and not use of the structure. The increased setbacks would be graduated between 60 and 90 times the annual erosion rate for structures between 10,000 and 100,000 square feet. North Carolina has also worked on a Comprehensive Beach and Inlet Management Plan and an estuarine shoreline classification system. Georgia is

currently inventorying, quantifying, and mapping armored wetland shorelines and studying the feasibility of alternative techniques for shoreline hardening in tidal wetlands and estuaries. The Florida Coastal High Hazard Study Committee convened in 2005-2006 and was charged with formulating recommendations for managing growth in Coastal High Hazard Areas, which are defined as the Category 1 hurricane evacuation zones. Some of the recommendations in their final report include improved technical resources, strengthened beachfront construction control lines and setbacks, and strengthened post-storm emergency coastal armoring rules. Florida also produces Critical Erosion Area Reports that contain county maps and tables of erosion problem areas, and Shoreline Change Rate Estimate Reports that provide erosion rate estimates on a county-by-county basis. Finally, some emerging sea level rise policies identified by the Coastal States Organization include revising public infrastructure siting policies, increasing shoreline setbacks, promoting alternative to bulkheads along sheltered coasts, developing GIS-based decision support tools, and encouraging consideration of sea level rise in regional and local plans.

Angela Sunley, Beach/Dune Team Leader for Texas' Coastal Protection Division within the General Land Office, presented the history and challenges of beachfront management in Texas (her presentation is also now posted on the Advisory Committee's website). Historically, the Line Of Vegetation delineated the boundary of private property, but *Luttes vs State Supreme Court* (1958) established the Mean Highest High Tide as the boundary between state owned lands and private property. After this ruling, private property owners fenced off the beaches and restricted public access. As a result, the Open Beaches Act was enacted in 1959 by a special session of the Legislature. The Act created the public beach easement between the Line Of Vegetation and Mean Low Tide, wherein the public has the right of free and unrestricted ingress and egress. The Dune Protection Act of 1977 declared that vegetated and un-vegetated sand dunes provide a barrier of protection from storm surge and that they are areas of significant biodiversity. In 1991, Texas' Legislature gave the Land Commissioner the authority to promulgate the Beach/Dune Rules. From 1993-1996, local governments adopted Beach Access and Dune Plans and the General Land Office certified these plans as consistent with the Dune Protection Act, Open Beaches Act, and the Beach/Dune Rules. In 2007, the 80th Legislature gave additional authority to write rules for removal orders, eligibility for windstorm insurance, public health and safety, obstruction of public access, and administrative penalties. In 1998, Tropical Storm Francis caused substantial erosion in Galveston and the Bolivar Peninsula in Galveston County. Local governments applied for FEMA grants funds for shore protection projects, and geo-textile tubes were installed.

These devices were used as temporary measures, and they are considered shoreline protection structures, not erosion response structures. Erosion response structures are not allowed in Texas. The Open Beaches Act, the Dune Protection Act, and the Beach/Dune Rules did not address shore protection projects, so the Coastal Coordination Council created Memorandums Of Agreement with the local governments and subdivisions. This lead to the following shore protection project rules:

- Projects are limited to the minimum size necessary to fulfill the project's goals and purposes.
- Projects are used only to protect community developments and public infrastructure; not for individuals.
- The location of the structures is limited.
- The pre-project beach width and access must be maintained, and financial assurance must be provided to do so.
- Projects shall not have a negative effect on nesting sea turtles or endangered species, or public beach access.
- Projects must not have a negative effect on adjacent beaches, and they require public input before installation.
- The sponsor of the project must present scientific information on beach width, project success, and maintenance.

Texas' beach/dune management authority comes from the Open Beaches Act and the Dune Protection Act, not the Coastal Management Plan. The Texas Coastal Management Plan funds relevant data acquisition projects, but it has little to no regulatory authority for coastline management or land use planning. Beachfront setbacks in Texas are implemented at the local level. For instance, the setback in Galveston and Galveston County is 25 feet from the landward toe of the dunes, the setback in Nueces County is 350 feet from the Line Of Vegetation where practicable, and the setback on South Padre Island is 200-600 feet from Mean High Tide. There has been more development in the areas where setbacks are minimal than in areas where setbacks are substantial. The public beach easement in Texas is a rolling easement, so when erosion leads to buildings being located on the easement, these structures are subject to enforcement and removal through civil litigation. The Plan for Texas Open Beaches established the guidelines for enforcement when an immediate threat to public health and safety is present. For homes 100% seaward of the Line Of Vegetation, the General Land Office offered up to \$50,000 for assistance with removal or relocation, and \$1.3 million has been allocated for this on-going effort. Presently, 116 houses are seaward of the Line Of Vegetation. Cumulatively, 24 relocation or demolition projects have been completed to date. Small revetment projects have been built to protect infrastructure and roadways, but other management practices are preferred. For instance, Texas has moved a road that was threatened by erosion. There are no private beaches in Texas, but beachfront property owners are increasingly requesting that local governments close the beaches to vehicular traffic. Presumptive criteria must be met for changes in access in the local plans, and the revised access must be greater or equal to the existing plan. Generally, one additional parking space is required for every 15 feet of beach that is closed to vehicular traffic. In light of the Plan for Texas Open Beaches, all coastal development in Texas must be "feasibly relocatable". Also, Texas requires property disclosure at the earnest money stage of the real estate buying process.

Perspectives from 1987 Blue Ribbon Committee members:

Dr. John M. Dean served on the 1987 Blue Ribbon Committee on Beachfront Management, and he is currently a Distinguished Professor Emeritus and Senior Fellow in Science and Ocean Policy with the Baruch Institute and University of South Carolina. Dr. Dean discussed his experience with the 1987 Committee and how that group interacted and functioned. According to Dr. Dean, the 1987 Committee was a very participatory group composed mostly of citizens from the community including mayors, builders, realtors, and lawyers. Six seats were held by delegates from each of the coastal counties in South Carolina, two seats were held by Senators, and two seats were held by members of the House. A reporter from Myrtle Beach was present at each meeting also. The process was very open and transparent, and the recommendations were developed by true consensus within the Committee. Scientists, engineers, and other technical people provided information to the 1987 Committee through presentations and workshops, but they were not members of the group. The Drumstick Model for Barrier Islands was introduced by Miles Hayes in 1975. This report informed barrier island communities about inlet migration, and Kiawah Island implemented different setbacks for inlet areas than for areas in the middle of the island. Nature is dynamic and does not respect geopolitical boundaries or property lines. Dr. Dean believes the current Committee has an advantage with better science, technology, and existing legislation, but that nature will always prevail.

Dr. Richard Beck also served on the 1987 Blue Ribbon Committee while he was mayor of the City of Folly Beach, and he has had a dental practice on James Island for 31 years. Dr. Beck was elected to city council in 1978, and he wanted to take charge of the beachfront management and erosion control of Folly Beach. At the time, the City of Folly Beach was suing the U.S. Army Corps of Engineers over the relationship between the Charleston Harbor jetties and the erosion of Folly Beach. The lawsuit was dropped, and the subsequent Section 111 review took about 7 years to negotiate, but it eventually led to Folly Beach's exemption from the Beachfront Management Act. (Section 111 of the 1968 River and Harbor Act, as amended, provides for the prevention of mitigation of erosion damages to public or privately owned shores when these damages are a result of a Federal navigation project.) Dr. Beck emphasized the need for pragmatism within the deliberations of the current Committee. The human component, beyond the technical and science issues, needs to always be considered since real people will be affected by the

Committee's deliberations and recommendations. He suggested that cost-benefit analysis is a valuable tool to use when considering the pros and cons of various policy options.

Question and Answer Session with Speakers:

A member of the Advisory Committee asked Dr. Dean and Dr. Beck if they had any advice on how to go about preparing a final report. Dr. Dean reiterated that the make-up of the two Committees is very different and that the approach will need to be different. The scientists and technical people did not write the recommendations for the 1987 Committee. Dr. Dean believes there may be a greater chance of the socio-economic and human components of analysis being left out of deliberations amongst scientists and engineers. Dr. Dean thinks the role of the Advisory Committee should be to tell politicians the upside and the downside of a certain issue, and then the politicians need to decide what to do with that information. The Advisory Committee cannot tell the politicians what to do with the information they are given. Dr. Beck added that shoreline management problems could be better approached on a site-specific, community-by-community level since South Carolina's coastline is so compartmentalized.

A member of the Advisory Committee asked what incentives were present at the time for realtors, developers, builders and others on the 1987 Committee to agree to the "dead zone" and beachfront setbacks. (Under the original 1988 Beachfront Management Act, the "dead zone" was the area 20 feet landward of the baseline, in which construction was prohibited. The 1990 amendments to the Beachfront Management Act did away with the dead zone, as well as the prohibition on construction seaward of the baseline.) Dr. Dean answered that the "dead zone" was not included as a recommendation from the 1987 Committee, but was added by the Legislature. The original 30-year setback line was based on a discussion about typical 30-year mortgages for oceanfront property.

A member of the Advisory Committee asked Dr. Beck if he now thinks the Folly Beach exemption was a good thing or a bad thing in light of "unwise development" allowed on the northeastern end of Folly Island. Dr. Beck replied that fortunately, beach nourishment performed amazingly well and lasted for about 12 years, so no new seawalls needed to be constructed. However, at East Folly Shores, a previous mayor of Folly Beach insisted that the line between private and public property be drawn at the +9 ft contour instead of at the traditional seawall line. This action effectively created additional lots and allowed people to build on the beach. The City of Folly Beach and OCRM did everything possible to prevent the house at the northeastern end of Folly Beach from being built, but concerns over "takings" arose. A recent renourishment project at that end of Folly Beach was privately funded.

A member of the Advisory Committee asked what policies that were developed 20 years ago could have possibly been better in retrospect. Dr. Dean reminded the Advisory Committee that once recommendations are made to the Legislature, the Committee no longer has control over what is done with the recommendations. Also, policy development depends upon who is in a leadership position and what he/she wishes to achieve.

A member of the Advisory Committee asked if the current discussions would be moot if the public did not subsidize the insurance industry. Another member mentioned a study that was done to analyze development patterns with and without subsidization. The study found that there would be very high cost developments that could insure themselves and very low cost developments that did not need insurance because they could be replaced fairly easily. Subsidization programs prevent these types of development scenarios from occurring. Angela Sunley mentioned that Texas has subsidized windstorm insurance, and the exposure is so great that if a major hurricane were to hit Galveston, the economy would suffer greatly. Dr. Dean believes an insurance specialist should become a permanent member of the Advisory Committee.

A member of the Advisory Committee expressed his belief that South Carolina has come to a crucial crossroads where people are moving closer and closer to the edge and nature is pushing back. Therefore, the 40-year retreat policy is one topic that needs to be reevaluated by the Committee. Also, South Carolina has changed from a manufacturing, commercial-based economy in the 1980s to a tourism-based economy today. The value of a day at the beach cannot be underestimated. Dr. Beck believes the current options for shoreline management are the same as the options 20 years ago. Dr. Dean agreed, and he believes the fundamental difference is the local, county, and state political leadership at the time of the 1987 Blue Ribbon Committee versus now. He emphasized the importance of strong leadership within city and county councils to accomplish local improvements in coastal management. However, regulations must be revised and strengthened so that local councils are not relied upon too heavily. A “good” council should not be able to create a different outcome than a “bad” council - state regulations and statutes need to guide their decisions.

A Committee member commented that it is very difficult to get a local elected official to take a stance on property rights issues because such a stance could cost him/her a seat in office. The possibility of “takings” claims oftentimes promotes unwise development.

A Committee member questioned why we have not retreated from the shoreline at all, even though the Beachfront Management Act promotes a 40-year retreat policy. Another Committee member stated that perhaps this is a testament to the success of beach renourishment in South Carolina. Development has not retreated because renourishment has been successful and relatively affordable. Like any public works project, beach renourishment requires a cost-benefit analysis.

Discussion of Draft Policy Process:

Braxton Davis led the Committee in a discussion of how it could create draft policy options. Public comments will be available to the Committee throughout the process, and the policy options could potentially be available on the Committee’s website as they are being developed. At each meeting, it is envisioned that presentations will be given in the morning on the topic for that day, followed by afternoon deliberations. The Committee members will determine which policy options they would like to explore further. Dr. Davis recommended that volunteer subcommittees be formed to develop the policy options for a given topic, and these subcommittees could report back to the group with

their draft templates for policy options. Committee members could respond by submitting comments at any time through the website; and the final draft templates would be discussed with the entire group during meetings at the end of the year. For reference, a draft template handout was provided to each member at the meeting.

A Committee member stated that the state of the science of shoreline change – past, present, and future – is needed, and should be a result of the Committee’s work. Identified vulnerabilities and levels of exposure would also get the attention of decision makers. Dr. Davis responded that an RFP has been issued for a “State of Knowledge” report on shoreline change. The person awarded the grant will interact very closely with the Advisory Committee and complement the group’s work.

A Committee member noted that the Committee will need to agree to some extent on the science that exists before policy options are thoroughly discussed. The degree of knowledge and risks could potentially shape the types of recommendations that are proposed in the final document.

A Committee member suggested that the group could be more effective if everyone discusses each policy option together rather than breaking into smaller volunteer subcommittees. Participation could decline if members don’t feel very involved in the process. Dr. Davis responded that each member may participate on each subcommittee if he/she desires. Some topics may not be of particular interest or concern to an individual member, so the option is available to wait for the draft policy options to be developed before commenting on them. Another Committee member agreed that it is sometimes easier to react to an early draft than to have too many people writing the first draft. Hopefully this will speed up the process without excluding anyone. All of the Committee members will be engaged in determining which policy options to explore before subcommittees form. Subcommittees will also benefit from the direction provided by the full Committee during these initial deliberations.

Next Steps and Agreements:

- 1) The next meeting, “Research and Information Priorities,” will take place on **January 25, 2008** in Columbia. This meeting will be followed by a hearing for the research community and the public.
- 2) The fourth meeting, “Beachfront Retreat Policy,” will take place on **February 21, 2008** in Beaufort. This meeting will be followed by a public hearing.
- 3) Committee members who arrived late to the meeting are encouraged to get in touch with OCRM to listen to the full audio transcript, which is available in OCRM’s Charleston office.
- 4) Submitted written public comment materials will be available at OCRM’s Charleston office and will be distributed to Committee members. Oral public comments are located in the meeting minutes.

5) OCRM will post digital versions of the Committee's information packet materials to the website.

6) Prior to the next meeting, OCRM will send the Committee some "homework" reading materials, an agenda for the January 25 meeting, potential dates for future meetings, and draft meeting minutes so that these items may be reviewed.

7) OCRM will post the approved meeting minutes from the September 14 meeting and the presentations from the November 30 meeting to its website at:

http://www.scdhec.gov/environment/ocrm/science/shoreline_comm.htm